

AMENDMENTS TO SPECIFICATION

Please replace the paragraph beginning at page 1, line 15 with the following new paragraph and rewritten paragraph:

The present application is a divisional application of application Serial No. 09/907,314, filed July 17, 2001, which in turn is a divisional of application Serial No. 09/282,048, filed March 29, 1999, now U.S. Patent 6,459,095, issued October 1, 2002.

The present application is related to the following [applications] applications/patents: Serial Numbers _____ 09/280,225, now U.S. Patent No. 6,314,019, issued November 6, 2001 (“Molecular Wire Crossbar Interconnects for Signal Routing and Communications”) [~~PD-10981966-1~~]; _____ 09/280,189, now U.S. Patent No. 6,128,214, issued October 3, 2000 (“Molecular Wire Crossbar Memory”) [~~PD-10981968-1~~]; _____ 09/282,045 (“Molecular Wire Crossbar Logic”) [~~PD-10981969-1~~]; _____ 09/282,049, now U.S. Patent No. 6,256,767, issued July 3, 2001 (“Demultiplexer for a Molecular Wire Crossbar Network (MWCN Demux)”) [~~PD-10981970-1~~]; and _____ 09/280,188 (“Molecular Wire Transistors”) [~~PD-10981967-1~~], all filed on even date herewith. The present application is the foundational application, upon which the related applications depend for construction of the various devices and apparatus disclosed and claimed therein.

Please replace the paragraph beginning at page 20, line 19 with the following rewritten paragraph:

The technology disclosed and claimed herein for forming crossed wires (micrometer or nanometer) may be used to perform a variety of functions and to form a variety of useful devices and circuits for implementing computing on a microscale and even on a nanoscale. Molecular wire crossbar interconnects (MWCI) for signal routing and communications are disclosed and claimed in related application Serial No. _____ [~~PD-10981966-1~~] 09/280,225 (U.S. Patent 6,314,019); molecular wire crossbar memory is disclosed and claimed in related application Serial No. _____ [~~PD-10981968-1~~] 09/280,189 (U.S. Patent 6,128,214); molecular wire crossbar logic (MWCL) employing programmable logic arrays is disclosed and claimed in related application Serial No. _____ [~~PD-10981969-1~~] 09/282,045; a demultiplexer for a MWC network is disclosed and claimed in related application Serial No. _____ [~~PD-~~

~~10981970-1~~ 09/282,049 (U.S. Patent 6,256,767); and molecular wire transistors are disclosed and claimed in related application Serial No. _____ [~~PD-10981967-1~~] 09/280,188, all filed on even date herewith.

Please replace the paragraph beginning at page 21, line 1 with the following rewritten paragraph:

As illustrated in FIG. 7, the switch 10 of the present can be replicated in a two-dimensional array to form a plurality, or array, 60 of switches to form a crossbar switch. FIG. 7 depicts a 6x6 array 60, but the invention is not so limited to the particular number of elements, or switches, in the array-. Access to a single point, e.g., 2b, is done by impressing voltage on wires 2 and b to cause a change in the state of the molecular species 18 at the junction thereof, as described above. Details of the operation of the crossbar switch array 60 are further discussed in related application Serial No. _____ [~~PD-10981966-1~~] 09/280,225 (U.S. Patent 6,314,019).